NEW HAMPSHIRE + FEDERAL LANDS.

1989 CONDITIONS REPORT FOR FEDERAL LANDS

Defoliation on Federal Lands

New Hampshire:
White Mountain National Forest

Pest	Acres
Gypsy Moth	2215 (1040-L, 289-M, 886-H)
Pear Thrips	119 (L)

Vermont:
GreenMountain National Forest

Pest	Acres
Gypsy Moth	2167 (1067-L, 146-M, 954-H)
Forest Tent Caterpillar	635 (173-L, 109-M, 353-H)
Saddled Prominent	320 (88-L, 232-M)
Complexes (GM, FTC, SP,PT)	1989 1901-L, 88-H)

New York:
West Point

Pest	Acres
Gypsy Moth	120

In 1989, Gypsy moth populations increased greatly on both the Green Mountain and White Mountain national Forests. Populations also increased greatly at West Point, but the caterpillars were killed by fungus (Entomophaga maimaiga) before they did much damage. Egg mass surveys indicate at least 3000 acres on the Green Mountain National Forest and 3000 acres on the White Mountain National Forest will be heavily defoliated unless suppression projects are undertaken. Suppression is tentatively planned on the Green Mountain NF. Projects are also planned for Saratoge National Park and Seneca Indian Lands in New York.

Forest Tent Caterpillar and Saddlrd Prominent populations also increased on the Green Mountain NF, and further increases are expected in 1990. Pear Thrips caused less damage in 1989 than in 1988. The outlook for 1990 is uncertain.

Ozone levels and resultant injury to vegetation were monitored on two wilderness areas on the White Mountain NF and one on the Green Mounatain NF. Both levels and injury were lower in 1989 than in 1988.

written by Jim O'Brien, Pathologist, DFO

NEW HAMPSHIRE

State of New Hampshire

Department of Resources and Economic Development

DIVISION OF FORESTS AND LANDS

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December 22, 1989

James Linnane
U.S. Forest Service, NA-S&PF
Concord and Mast Roads
Post Office Box 640
Durham, N.H. 03824

Dear Jim:

Here are New Hampshire's Forest Insect and Disease Conditions Report for 1989:

New Hampshire - Briefs on the State of Forest Pest Monitoring

Forest Insect and Disease Unit of the Forest Protection Section has lost the services of Ben Lyons. Ben has retired with 32 years of Blister Rust and forest pest experience after suffering a heart attack on August 26, 1989.

Severe budget restrictions affecting out-of-state travel, equipment purchases, a hiring freeze and reductions in our current operating budget have been put in place temporarily until the Legislature meets in January to determine the final degree of the reductions.

Pest Status

Pear Thrips - populations failed to materialize anywhere in New Hampshire this Spring. A few individual thrips were seen. All reported damage was difficult to detect. Application of Sevin to affected sugar maple stands was cancelled due to insufficient insect populations. All other aspects of the planned Pilot Test were carried out. Data analysis and conclusions are in progress at this time.

Gypsy Moth - defoliation continued to increase in extent and numbers of areas receiving heavy defoliation. Egg mass counts this Fall showed large increases at many locations. Locations with egg mass counts of 500 plus per acre plus the outbreak areas portend very extensive defoliation in 1991 if we have a windy spring in 1990 and favorable feeding conditions throughout the summer.

Spruce Budworm - reports were negative this year. Lack of manpower prevented

trap deployment. Aerial fire patrols did not spot any defoliated areas caused by this insect, although several patches of severely winter-killed and damaged spruce and balsam fir was reported and investigated.

Happy Holidays,

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Alfred C. Avery
Forest Entomologist

ACA:sp

1989 PEST CONDITIONS REPORT WORKSHEET

PEST (COMMON NAME): Gypsy Moth

(SPECIFIC NAME): Lymantria dispar (Linnaeus)

HOST: Various hardwoods with oak preference.

PRESENT CONDITION: 18,400 acres heavily defoliated with an additional 40-50,000 acres of light to moderate.

AREA (TOTAL ACRES):

LOCATION: scatterred locations throughout southern NH south of the WMNF.

SEVERITY (INCLUDE ACRES OF MODERATE AND HEAVY DEFOLIATION OR INFECTION; DEFINE CLASSES):

18,400 acres of heavy defoliation as seen from the air where 80-100% of the foliage had been eaten.

LOSSES (INCLUDE AREAS OF TREE MORTALITY; ALSO VOLUME AND/OR $ ESTIMATES):

None observed.

TREND:

PAST TO PRESENT: areas of defoliation have continued to increase as well as an increase in the number of locations.

FUTURE: Egg mass counts per acre took a dramatic increase in 1989. Average trap site counts went from 101 EM/A to 780 EM/A in 1989.

CONTROL PROJECTS (METHOD, MATERIAL, ACRES, COST, RESULTS):

Several commercial aerial projects have come to our attention that are scheduled for this coming spring. Also, requests for advice concerned communities and citizens have begun to arrive.

COMMENTS:

Expect a blow-up in 1991 if 1990 gives us a windy spring.

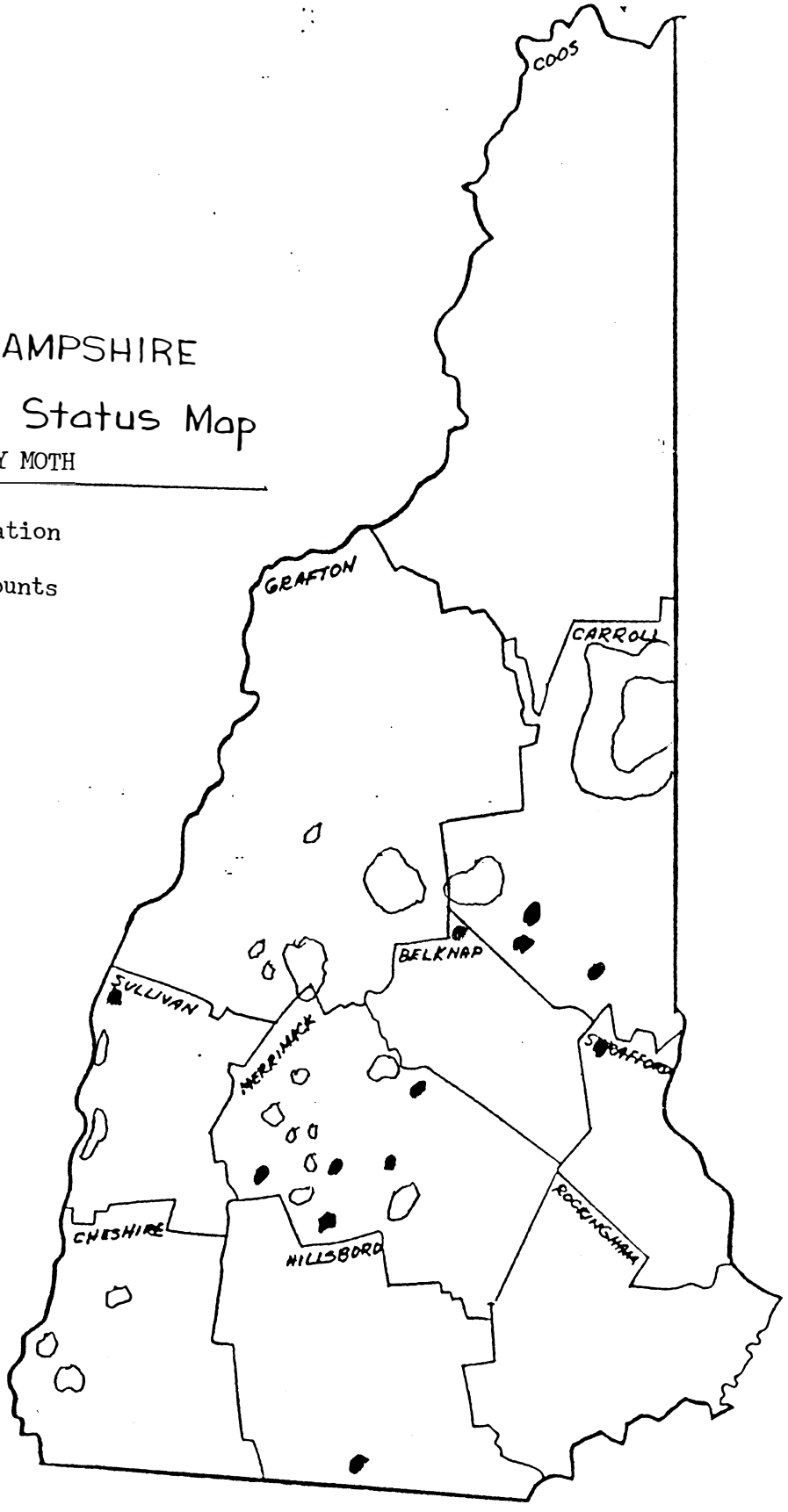
NEW HAMPSHIRE

Forest Pest Status Map

Pest: GYPSY MOTH

Heavy Defoliation

● 500 + EM/A counts



Year: 1989

NH

1989 PEST CONDITIONS REPORT WORKSHEET

PEST (COMMON NAME): Pear Thrips

(SPECIFIC NAME): Taeniothrips inconsequens (Uzel)

HOST: Hardwoods in general with a preference for sugar maple.

PRESENT CONDITION: Observed in Sullivan, Merrimack and Grafton Counties.

AREA (TOTAL ACRES): Not Applicable.

LOCATION: Visual sightings in the towns of Franklin, Acworth, Langdon and Charlestown.

SEVERITY (INCLUDE ACRES OF MODERATE AND HEAVY DEFOLIATION OR INFECTION; DEFINE CLASSES):

All sightings were in the range of 1- 10 individual thrips. Damage levels to individual leaves &/or buds were minor to none.

LOSSES (INCLUDE AREAS OF TREE MORTALITY; ALSO VOLUME AND/OR $ ESTIMATES):

TREND:

PAST TO PRESENT: Observable foliage damage levels as seen from aerial surveys conducted in 1988 to no aerially visible damage levels in 1989.

FUTURE: Unknown.

CONTROL PROJECTS (METHOD, MATERIAL, ACRES, COST, RESULTS):

1989 Spring control application of Sevin was cancelled because of insufficient thrips' populations. Pilot project was prepared for treatment of approximately 500 acres.

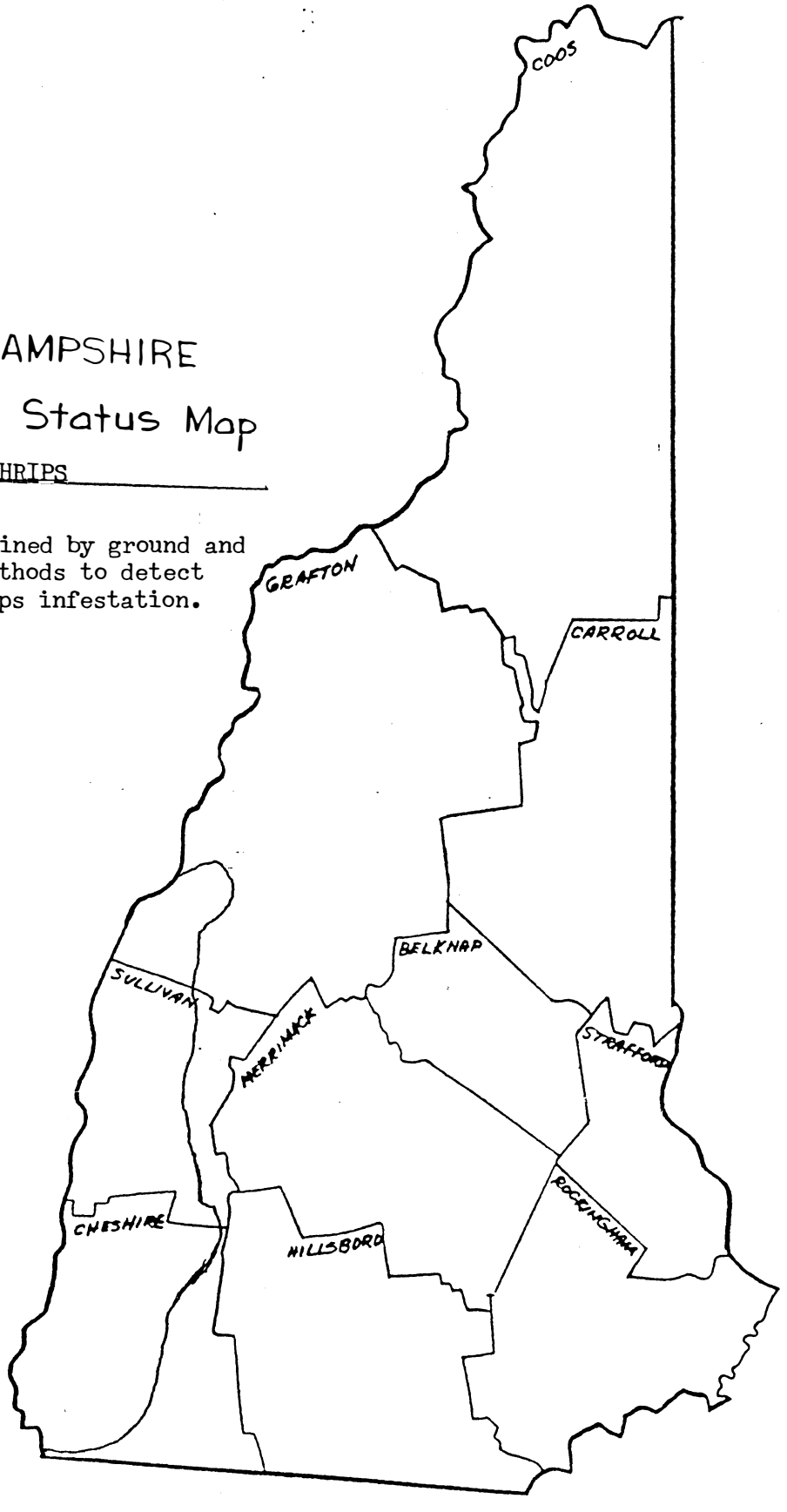
COMMENTS:

NEW HAMPSHIRE

Forest Pest Status Map

Pest: PEAR THRIPS

Area examined by ground and aerial methods to detect pear thrips infestation.



Year: 1989

1989 PEST CONDITIONS REPORT WORKSHEET

PEST (COMMON NAME): Oak Leaftier

(SPECIFIC NAME): Croesia semipurpurana (Kearfott)

HOST: Red oak.

PRESENT CONDITION: Populations have continued to decrease. No evidence of defoliation was detected in 1989.

AREA (TOTAL ACRES):

LOCATION: An aerial defoliation survey over 16, 160 acres did not detect any OLT defoliation in SW portions of the state.

SEVERITY (INCLUDE ACRES OF MODERATE AND HEAVY DEFOLIATION OR INFECTION; DEFINE CLASSES):

None.

LOSSES (INCLUDE AREAS OF TREE MORTALITY; ALSO VOLUME AND/OR $ ESTIMATES):

Not assessed.

TREND:

PAST TO PRESENT: Egg counts taken in 1988 predicted Light Defoliation for 1989. Trapping was not conducted in 1989. Trend continues downward for the second year.

FUTURE: Survey data not available at this time.

CONTROL PROJECTS (METHOD, MATERIAL, ACRES, COST, RESULTS):

None.

COMMENTS: